



ENVIRONMENTAL GEOLOGISTS & ENGINEERS
511 KEISLER DRIVE – SUITE 102
CARY, NORTH CAROLINA 27518
OFFICE: (919) 858-9898
WWW.DUNCKLEEDUNHAM.COM

Email To: Brian.Kvam@cardno.com

March 8, 2019

Mr. Brian Kvam
Senior Project Manager
Cardno
1812 Lincoln Street, Suite 301
Columbia, South Carolina 29201

Reference: **Report of Asbestos and Lead-Based Paint Surveys**
215 Bonview Avenue
Lincolnton, North Carolina

Dear Mr. Kvam:

As authorized by your notice to proceed via email dated February 15, 2019, Duncklee & Dunham, P.C. (Duncklee & Dunham) submits this report to document the surveys for asbestos-containing materials (ACM) and lead-based paint (LBP) we conducted at the referenced site. The purpose of the surveys was to determine if ACM and LBP are present prior to potential renovation activities.

Site Description

The subject site is an approximately 87,437 square-foot, two-story industrial building constructed in 1905 with a basement and crawlspace. We understand that the building may be renovated. The building consists of cinderblock walls with metal ceilings. Select ceiling areas are finished with ceiling tile. The floors are finished with hardwood, vinyl floor tile with mastic, carpet, or unfinished concrete. Pipes are insulated with block, air-cell, cork, foam glass, styrofoam or fiberglass. The exterior of the building is finished with brick and cinderblock. Window glazing is located at select window areas. The roof of the building was included in the scope of these surveys where accessible. A large portion of the middle of the building had collapsed and was inaccessible. In addition, we did not walk on the roof or enter the crawlspace due to safety concerns.

Field Activities

Our survey included a visual inspection and the collection of samples to be tested for asbestos. Duncklee & Dunham collected 22 samples on February 26, 2019 in general accordance with United States Environmental Protection Agency (USEPA) Regulation 40 CFR 763 - Asbestos Hazard Emergency Response Act. We submitted the samples to Eurofins|CEI Labs, located in Cary, North Carolina, to be

analyzed for asbestos by Polarized Light Microscopy using USEPA Method 600/R-93/116. CEI is accredited under the National Voluntary Accreditation Program Lab Code 101768-0.

In addition, Duncklee & Dunham collected four paint samples from painted surfaces of the building. We submitted these samples to Eurofins|CEI Labs to be analyzed for lead in accordance with USEPA Method SW846/7000B.

Results and Recommendations

Asbestos

The laboratory report is attached. Asbestos was detected above 1% in the following materials:

Sample Number	Sample Description	Material Location	Percent/Type Asbestos	Estimated Quantity
1	White Block Pipe Insulation	Throughout and in Crawlspace	5% Chrysotile 5% Amosite	12,000 Linear Feet
2	Mastic on Foam Glass Pipe Insulation	Throughout	10% Chrysotile	350 Linear Feet
5	Floor Tile	Production Room 1	5% Chrysotile	4,760 Square Feet
	Mastic	Production Room 1	3% Chrysotile	
6	Wall Panel Insulation	HVAC Rooms at Basement, 1 st Floor and Roof	50% Chrysotile	640 Square Feet
7	Electrical Box Insulation	1 st Floor HVAC Room	50% Chrysotile	5 Square Feet
8	White Block Pipe Insulation	Throughout and in Crawl Space	60% Chrysotile	Included in quantity for sample #1
9	Insulating Boards	HVAC Rooms at Basement, 1 st Floor and Roof	50 % Chrysotile	Included in quantity for sample #6
11	Tank/Boiler Insulation	Boiler Room	60% Chrysotile	365 Square Feet
12	Floor Tile	Basement	10% Chrysotile	Included in quantity for sample #5
12	Mastic	Basement	5% Chrysotile	
14	Floor Tile	Basement	10% Chrysotile	
	Mastic	Basement	5% Chrysotile	
15	Floor Tile	Basement	10% Chrysotile	
	Mastic	Basement	5% Chrysotile	
16	Floor Tile	Basement	5% Chrysotile	
	Mastic	Basement	5% Chrysotile	
17	Floor Tile Mastic	Basement	3% Chrysotile	
18	Silver Paint on Foam-Glass	Boiler Room	3% Chrysotile	350 Linear Feet
	Tar on Foam-Glass	Boiler Room	10% Chrysotile	
19	Steam Pipe Insulation	Boiler Room	10% Amosite	Included in quantity for sample #1



Sample Number	Sample Description	Material Location	Percent/Type Asbestos	Estimated Quantity
20	Built-Up Roofing	Roof	15% Chrysotile	70,000 Square Feet
21	Built-Up Roofing	Roof	15% Chrysotile	Included in quantity for sample #20
22	Steam Pipe Insulation	Boiler Room	20% Amosite	Included in quantity for sample #1

The asbestos-containing white block pipe insulation, wall panel insulation, electrical box insulation, insulating boards and tank/boiler insulation are considered friable materials in fair to poor condition. The asbestos-containing vinyl floor tile and built-up roofing are considered Category I non-friable materials in poor condition. The black mastic, paint and tar on the foam-glass pipe insulation are Category II non-friable materials in fair condition. The identified ACM should be removed by a qualified asbestos-abatement contractor prior to activities which may disturb the materials. In addition, a large quantity of insulation has fallen off the pipes and onto the soil of the crawlspace. This soil is assumed to be contaminated with asbestos-containing pipe insulation. The soil should not be disturbed until an asbestos abatement design is developed and implemented. The design may include encapsulation or removal of the soil.

The USEPA regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP) requires that regulated ACM be identified, classified and quantified prior to any disturbance. In addition, the North Carolina Department of Health and Human Services Health Hazards Control Unit regulates asbestos activities under 10A NCAC 41C Section .0600 – Asbestos Hazard Management Program.

In accordance with these regulations, asbestos air monitoring is required, and an accredited Asbestos Designer must prepare a design for the removal of ACM associated with permitted removal projects that include more than 3,000 square feet, 1,500 linear feet, or 656 cubic feet of Regulated Asbestos Containing Materials. For this project, air monitoring and a design are required prior to disturbance of ACM.

Lead-Based Paint

Lead was detected above 0.5% by weight in the following samples of paint collected at the site:

- blue paint on poles in shipping and receiving department,
- tan paint on interior walls of production room #2 near exit door, and
- blue paint on walls and doors in basement near boiler room.

If LBP is to be disturbed by workers, the regulations listed below will apply to this project. The lead laboratory report is attached.

Paint is considered LBP if it contains lead in concentrations equal to or greater than 0.5% by weight. OSHA has regulations governing construction worker exposure to lead. Employers of construction workers engaged in the repair, renovation, removal, demolition, and salvage of flood-damaged structures



and materials are responsible for the development and implementation of a worker protection program in accordance with Title 29 Code of Federal Regulations (CFR), Part 1926.62.

OSHA sets a permissible exposure limit (PEL) of 50 micrograms of lead per cubic meter of air, as averaged over an 8-hour period, and requires that employers use engineering controls and work practices, where feasible, to reduce worker exposure. OSHA also requires that employees observe good personal hygiene practices, such as washing hands before eating and taking a shower before leaving the worksite, and that employees be provided with protective clothing and, where necessary, with respiratory protection in accordance with 29 CFR 1910.134.

We appreciate this opportunity to provide services to Cardno. Please contact Doug Weaver at 919-858-9898 (doug@dunckleedunham.com) if you have any questions or require additional information.

Sincerely,

Duncklee & Dunham, P.C.




Tyler Mericka
NC Asbestos Inspector #13102



Doug Weaver
Project Manager

Senior Peer Review



Richard A. Kolb, L.G.
Senior Geologist

Attachment: Laboratory Reports
Site Photos

P:\Cardno\2019031 - Lincolnton NC ACM & LP Surveys\215 Bonview Ave\Report of ACM and LP Survey - 19128.docx



February 28, 2019

Duncklee & Dunham
511 Keisler Drive Suite 102
Cary, NC 27518

CLIENT PROJECT: 215 Bonview Ave
CEI LAB CODE: A194179

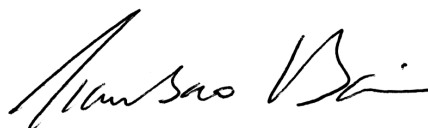
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on February 27, 2019. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH
Laboratory Director

ASBESTOS ANALYTICAL REPORT

By: Polarized Light Microscopy

Prepared for

Duncklee & Dunham

CLIENT PROJECT: 215 Bonview Ave

LAB CODE: A194179

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 02/28/19

TOTAL SAMPLES ANALYZED: 22

SAMPLES >1% ASBESTOS: 24

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: 215 Bonview Ave

LAB CODE: A194179

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
1		A59845	White	Insulated Pipe	Chrysotile 5% Amosite 5%
2	Layer 1	A59846	Black	Foam	None Detected
	Layer 2	A59846	Black	Tar	Chrysotile 10%
3		A59847	Brown	Ceiling Tile	None Detected
4		A59848	Off-white	Ceiling Tile	None Detected
5		A59849A	Tan	Floor Tile	Chrysotile 5%
		A59849B	Black	Mastic	Chrysotile 3%
6		A59850	Off-white	Wall Panel Insulation	Chrysotile 50%
7		A59851	Off-white	Pipe Electric Hvac Rm	Chrysotile 50%
8		A59852	Off-white	Insulation-12 Inch Pipe	Chrysotile 60%
9		A59853	Beige	Insulating Board	Chrysotile 50%
10		A59854	Pink	Window Glazing	None Detected
11		A59855	Off-white	Boiler Rm Tank	Chrysotile 60%
12		A59856A	Green	Floor Tile	Chrysotile 10%
		A59856BA194179	Black	Mastic	Chrysotile 5%
13		A59857A	Red	Floor Tile	None Detected
		A59857B	Tan	Mastic	None Detected
14		A59858A	Gray	Floor Tile	Chrysotile 10%
		A59858B	Black	Mastic	Chrysotile 5%
15		A59859A	Green	Floor Tile	Chrysotile 10%
		A59859B	Black	Mastic	Chrysotile 5%
16		A59860A	Black	Floor Tile	Chrysotile 5%
		A59860B	Black	Mastic	Chrysotile 5%
17		A59861A	Off-white	Floor Tile	None Detected
		A59861B	Black,Tan	Mastic	Chrysotile 3%
18	Layer 1	A59862	Silver	Piping Boiler Rm -silver Paint	Chrysotile 3%
	Layer 2	A59862	Silver	Piping Boiler Rm -tar	Chrysotile 10%
19		A59863	Off-white	Boiler Rm Steam Pipe	Amosite 10%
20		A59864	Black	Built Up Roof	Chrysotile 15%
21		A59865	Black	Built Up Roof	Chrysotile 15%
22		A59866	Off-white	Boiler Rm Pipe Tsi	Amosite 20%

Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: 215 Bonview Ave

LAB CODE: A194179

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

					ASBESTOS
Client ID	Layer	Lab ID	Color	Sample Description	%

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Duncklee & Dunham
511 Keisler Drive Suite 102
Cary, NC 27518

Lab Code: A194179
Date Received: 02-27-19
Date Analyzed: 02-28-19
Date Reported: 02-28-19

Project: 215 Bonview Ave

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
1 A59845	Insulated Pipe	Heterogeneous White Fibrous Loosely Bound			90%	Binder	5% Chrysotile 5% Amosite
2 Layer 1 A59846	Foam	Heterogeneous Black Non-fibrous Bound			100%	Foam	None Detected
Layer 2 A59846	Tar	Heterogeneous Black Fibrous Bound			25% 65%	Silicates Tar	10% Chrysotile
3 A59847	Ceiling Tile	Heterogeneous Brown Fibrous Loosely Bound	97%	Cellulose	3%	Paint	None Detected
4 A59848	Ceiling Tile	Heterogeneous Off-white Fibrous Loosely Bound	35% 32%	Cellulose Fiberglass	30% 3%	Perlite Paint	None Detected
5 A59849A	Floor Tile	Heterogeneous Tan Fibrous Tightly Bound			65% 30%	Vinyl Calc Carb	5% Chrysotile
A59849B	Mastic	Heterogeneous Black Fibrous Bound			97%	Mastic	3% Chrysotile

Lab Code: A194179
Date Received: 02-27-19
Date Analyzed: 02-28-19
Date Reported: 02-28-19

ASBESTOS BULK PLM, EPA 600 METHOD

Page 2 of 6

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Duncklee & Dunham
511 Keisler Drive Suite 102
Cary, NC 27518

Lab Code: A194179
Date Received: 02-27-19
Date Analyzed: 02-28-19
Date Reported: 02-28-19

Project: 215 Bonview Ave

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
A59856BA194 179	Mastic	Heterogeneous Black Fibrous Bound		95% Mastic	5% Chrysotile
13 A59857A	Floor Tile	Heterogeneous Red Non-fibrous Tightly Bound	65% 35%	Vinyl Calc Carb	None Detected
A59857B	Mastic	Heterogeneous Tan Fibrous Bound	<1% Cellulose	100% Mastic	None Detected
14 A59858A	Floor Tile	Heterogeneous Gray Fibrous Tightly Bound	60% 30%	Vinyl Calc Carb	10% Chrysotile
A59858B	Mastic	Heterogeneous Black Fibrous Bound	95%	Mastic	5% Chrysotile
15 A59859A	Floor Tile	Heterogeneous Green Fibrous Tightly Bound	60% 30%	Vinyl Calc Carb	10% Chrysotile
A59859B	Mastic	Heterogeneous Black Fibrous Bound	95%	Mastic	5% Chrysotile

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Duncklee & Dunham
511 Keisler Drive Suite 102
Cary, NC 27518

Lab Code: A194179
Date Received: 02-27-19
Date Analyzed: 02-28-19
Date Reported: 02-28-19

Project: 215 Bonview Ave

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
16 A59860A	Floor Tile	Heterogeneous	60%	Vinyl	5% Chrysotile
		Black	35%	Calc Carb	
		Fibrous			
		Tightly Bound			
A59860B	Mastic	Heterogeneous	95%	Mastic	5% Chrysotile
		Black			
		Fibrous			
		Bound			
17 A59861A	Floor Tile	Heterogeneous	65%	Vinyl	None Detected
		Off-white	35%	Calc Carb	
		Non-fibrous			
		Tightly Bound			
A59861B	Mastic	Heterogeneous	97%	Mastic	3% Chrysotile
		Black, Tan			
		Fibrous			
		Bound			
18 Layer 1 A59862	Piping Boiler Rm -silver Paint	Heterogeneous	92%	Paint	3% Chrysotile
		Silver	5%	Tar	
		Fibrous			
		Bound			
Layer 2 A59862	Piping Boiler Rm -tar	Heterogeneous	80%	Tar	10% Chrysotile
		Silver	10%	Silicates	
		Fibrous			
		Bound			
19 A59863	Boiler Rm Steam Pipe	Heterogeneous	90%	Binder	10% Amosite
		Off-white			
		Fibrous			
		Loosely Bound			

ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

Client: Duncklee & Dunham
511 Keisler Drive Suite 102
Cary, NC 27518

Lab Code: A194179
Date Received: 02-27-19
Date Analyzed: 02-28-19
Date Reported: 02-28-19

Project: 215 Bonview Ave

ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
20 A59864	Built Up Roof	Heterogeneous Black Fibrous Bound	85%	Tar	15% Chrysotile
21 A59865	Built Up Roof	Heterogeneous Black Fibrous Bound	85%	Tar	15% Chrysotile
22 A59866	Boiler Rm Pipe Tsi	Heterogeneous Off-white Fibrous Loosely Bound	80%	Binder	20% Amosite

LEGEND: Non-Anth = Non-Asbestiform Anthophyllite
 Non-Trem = Non-Asbestiform Tremolite
 Calc Carb = Calcium Carbonate

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORTING LIMIT: <1% by visual estimation

REPORTING LIMIT FOR POINT COUNTS: 0.25% by 400 Points or 0.1% by 1,000 Points

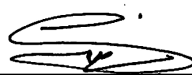
REGULATORY LIMIT: >1% by weight

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

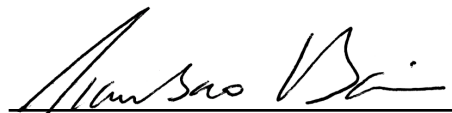
Information provided by customer includes customer sample ID, location, volume and area as well as date and time of sampling.

ANALYST:



Saithya Paikal

APPROVED BY:



Tianbao Bai, Ph.D., CIH
 Laboratory Director



CEI

730 SE Maynard Road, Cary, NC 27511

Tel: 866-481-1412; Fax: 919-481-1442

CHAIN OF CUSTODY

LAB USE ONLY:

CEI Lab Code:

CEI Lab I.D. Range: A59845-A59866

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: <u>Dunklee Durham</u>		Email / Tel:	
Address:		Project Name: <u>215 Bonview Ave</u>	
		Project ID#:	
Email:		PO #:	
Tel: Fax:		STATE SAMPLES COLLECTED IN: <u>NC</u>	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS / SPECIAL INSTRUCTIONS:

NR

Accept Samples

☐

Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
<u>[Signature]</u>	<u>Feb 26</u>	<u>VJC</u>	<u>8:40am 2/27/19</u>

Samples will be disposed of 30 days after analysis

SAMPLING FORM

COMPANY CONTACT INFORMATION	
Company: <u>Dunklee Dunham</u>	Job Contact:
Project Name: <u>215 Bonview Ave</u>	
Project ID #:	Tel:

SAMPLE ID#	DESCRIPTION / LOCATION	VOLUME/ AREA	TEST	
①	insulated pipe (TSI)		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
②	flat rock		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
③	1x1 tongue and g.		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
④	2x4 ceiling tile		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑤	9x9 floor tile tan		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑥	wall panel insulation		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑦	pipe electric HVAC Rm		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑧	12 inch pipe		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑨	insulating boards		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑩	red floor tile window glazing		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑪	Boiler Rm tank		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑫	9x9 multi color floor tile		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑬	12x12 red floor tile		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑭	9x9 multi color floor tile		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑮	" "		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑯	" "		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑰	" "		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑱	flat rock of piping boiler rm		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑲	boiler rm Steam Pipe		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
⑳	Shingle Roof Built up roof		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
㉑	" "		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
22	Boiler Room Pipe TSI		PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
			PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
			PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
			PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
			PLM <input type="checkbox"/>	TEM <input type="checkbox"/>
			PLM <input type="checkbox"/>	TEM <input type="checkbox"/>

Client: **Duncklee & Dunham**
511 Keisler Drive Suite 102
Cary, NC 27518

Lab Code: C190177
Received: 02-27-19
Analyzed: 03-01-19
Reported: 03-02-19

Project: 215 Boneview

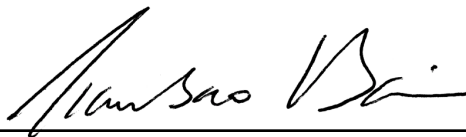
ANALYSIS METHOD: EPA SW846 7000B

CLIENT ID	LAB ID	PPM (µg/g)	CONCENTRATION % BY WEIGHT
LP1	CA0969	15000	1.5
LP2	CA0970	7300	0.73
LP3	CA0971	1000	0.10
LP4	CA0972	9100	0.91

ANALYSIS METHOD: EPA SW846 7000B

CLIENT ID	LAB ID	PPM (µg/g)	CONCENTRATION % BY WEIGHT
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Reviewed By:



Tianbao Bai, Ph.D.
Laboratory Director

This method has been validated for sample weights of 0.020g or greater. When samples with a weight of less than that are analyzed those results fall outside of the scope of accreditations.

*** The analysis of composite wipe samples as a single samples is not included under AIHA accreditation.**

Minimum reporting limit is 10 µg total lead. Sample results denoted with a "less than" (<) sign contain less than 10.0 µg total lead, based on a 40ml sample volume.

Lead samples are not analyzed by Eurofins CEI Lead samples are submitted to an AIHA ELLAP accredited laboratory for lead analysis of soil, dust, paint, and TCLP samples.

Laboratory results represent the analysis of samples as submitted by the client. Information regarding sample location, description, area, volume, etc., was provided by the client. Unless notified in writing to return samples, Eurofins CEI discards client samples after 30 days. This report shall not be reproduced, except in full, without the written consent of Eurofins CEI.

Information provided by customer includes customer sample ID, location, volume and area as well as date and time of sampling.

**REGULATORY
LIMITS**

OSHA Standard: No safe limit.
Consumer Products Safety Standard: Greater than 0.009% lead by weight.
Federal Lead Standard / HUD: 0.5% lead by weight.

LEGEND

µg = microgram
ml = milliliter

ppm = parts per million
Pb = lead

g = grams
wt = weight

End of Report



CEI

730 SE Maynard Road, Cary, NC 27511

Tel: 866-481-1412; Fax: 919-481-1442

CHAIN OF CUSTODY

LAB USE ONLY:

CEI Lab Code:

C190177 ④

CEI Lab I.D. Range: CA0969 - CA0972

COMPANY INFORMATION		PROJECT INFORMATION	
CEI CLIENT #:		Job Contact:	
Company: <i>Dunklee Dunham</i>		Email / Tel:	
Address:		Project Name: <i>215 Boneview</i>	
		Project ID#:	
Email:		PO #:	
Tel:	Fax:	STATE SAMPLES COLLECTED IN: <i>NC</i>	

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER: <i>lead</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS / SPECIAL INSTRUCTIONS:



Accept Samples



Reject Samples

Relinquished By:	Date/Time	Received By:	Date/Time
<i>R</i>	<i>2/26/19</i>	<i>VJC</i>	<i>8:40am 2/27/19</i>

Samples will be disposed of 30 days after analysis



SAMPLING FORM

COMPANY CONTACT INFORMATION

Company: <i>Dunklee Dunham</i>	Job Contact:
Project Name: <i>215 Boreview Ave</i>	
Project ID #:	Tel:

[illegible]

Photo 17 – Collapsed ceiling/floor area on ground floor



Photo 1– View of Boiler Room in SE Corner of Basement



Photo 2– Hot Water Tank in Boiler Room

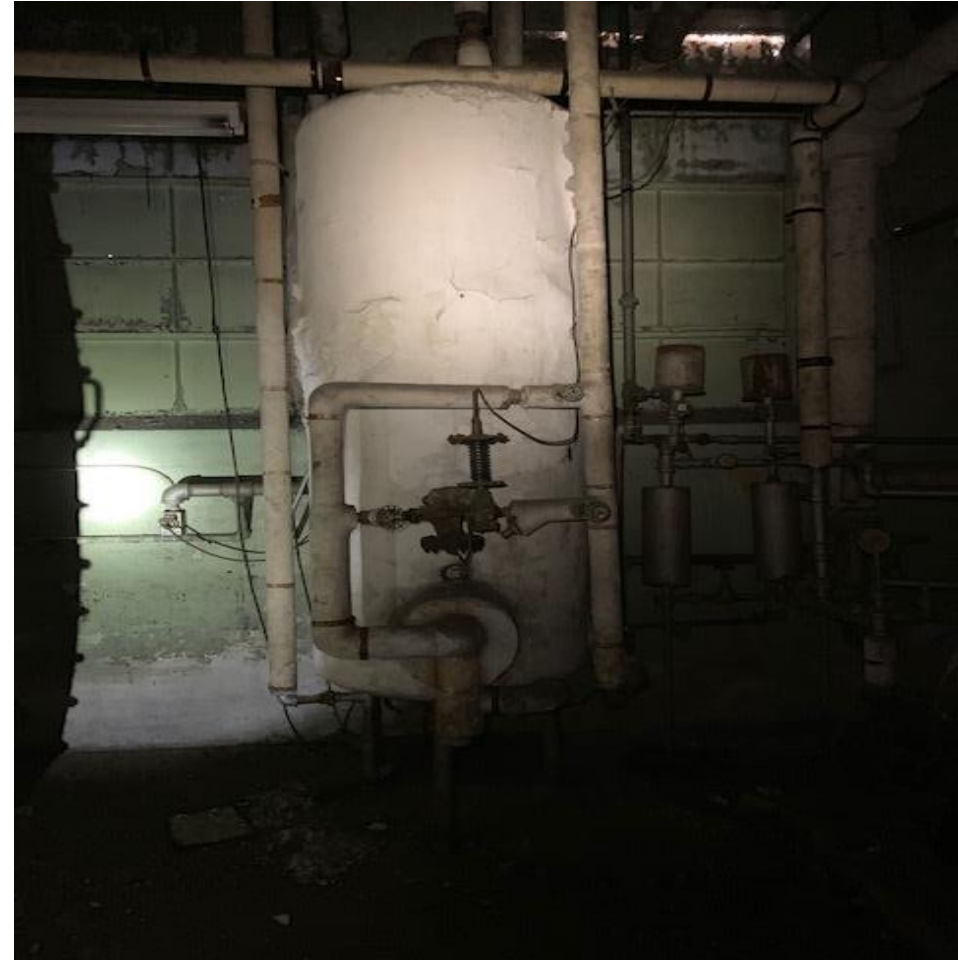


Photo 3 – Layout of SE Basement Boiler Room



Photo 4 – Encased Pipe Insulation in SE Basement Boiler Room



Photo 5 – Pipe Runs in SE Corner Boiler Room in Basement

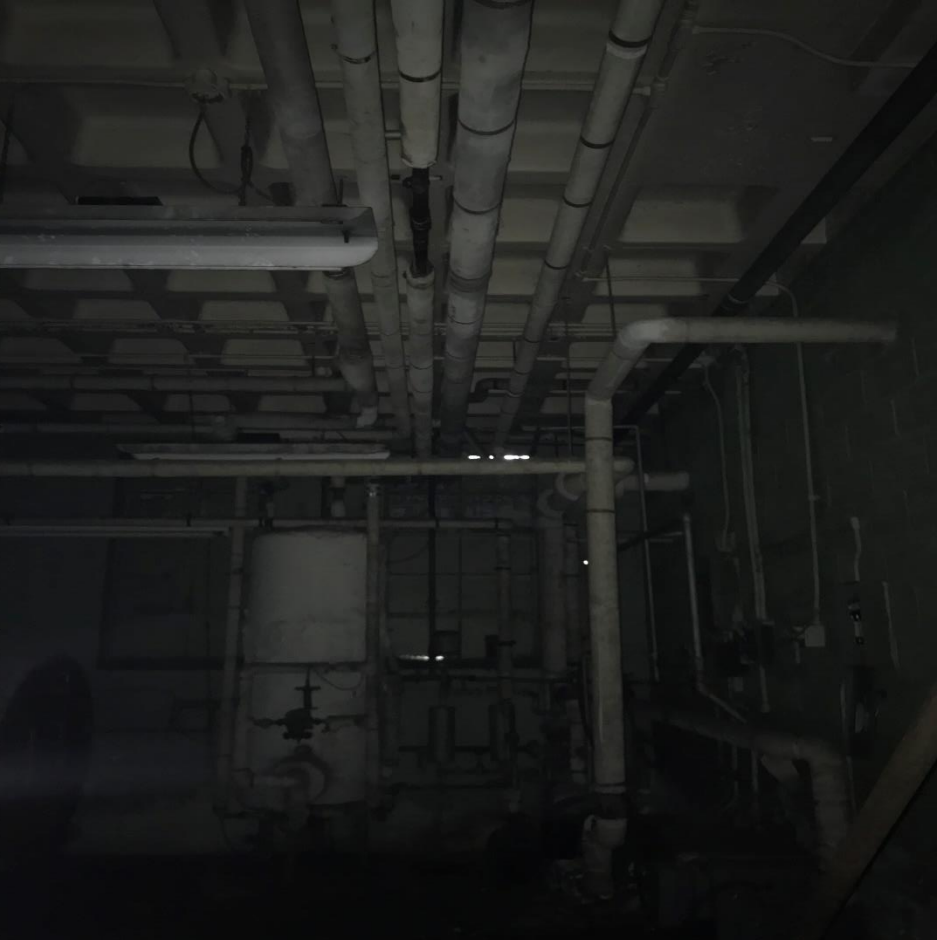


Photo 6 – SE Basement Corner Pipe Insulation in Boiler Room



Photo 7 – Pipe Runs and Boilers in SW Corner of Basement



Photo 8 – Pipe Runs and Boilers in SW Corner of Basement cont.



Photo 9 – Insulated Box in Ground Floor HVAC Room



Photo 10 – Poor Condition Pipe Insulation Running to Outside of Basement



Photo 11 – Poor Condition Delaminated Pipe Insulation on Crawlspace Dirt



Photo 12 – Asbestos Pipe Insulation on Crawlspace Dirt



Photo 13 – Contaminated Soil in Crawlspace



Photo 14 – Pipe Missing Insulation in Crawlspace



Photo 15 -- Poor Condition Pipe Insulation in Crawlspace



Photo 16 – Asbestos 9”x9” Floor Tile in Bathrooms



Photo 17 – Collapsed Ceiling/Floor Area on Ground Floor

